

11377-1US

- 2 -

IN THE CLAIMS

1.(currently amended) An electrical circuit for connection to a conventional domestic voltage 120 volt source having a current carrying capacity of 15 amperes for powering a ~~low output~~ current controlled induction motor while generating heat, said circuit comprising a resistor heater means whose value can be selected connected in series with said motor, the selected value of said resistor heater means being such as to provide on connection of said circuit to said source, a current flow ~~therethrough~~ through said resistor means to produce a voltage drop thereacross just less than the source voltage, ~~and~~ said current controlled motor having coil windings of ~~a low number of~~ fewer than 50 and at least about 28 turns of wire of a wire size to accept ~~the~~ a current of up to about 15 amperes ~~flowing through the resistor heater means~~ without heating. whereby the current through said resistor means whose value has been selected determines motor speed. ~~the voltage drop across the motor is less than about five volts.~~

2. Cancel

3.(currently amended) A circuit as claimed in Claim 2 1 in which said wire size of said motor windings is of the order of 14 to 18 gage gauge wire.

4.(currently amended) A circuit as claimed in Claims 1,2 or 3 in which the number of turns of said motor windings ~~is approximately twenty-eight~~ are fewer than 40 turns.

11377-1US

- 3 -

5.(currently amended) A circuit as claimed in Claims 1, 2 or 3 in which said motor is a shaded 2 pole induction motor in which the number of turns of said coil windings ~~comprise approximately 14~~ are fewer than 20 turns per pole.

6. Cancel

7.(currently amended) A circuit as claimed in Claim 6 1 in which said motor is a shaded 4 pole induction motor having ~~approximately 7~~ fewer than 10 turns of wire per pole.

8.(currently amended) A circuit as claimed in Claims 1, 6 or 7 in which said resistor heater means ~~comprises~~ includes ~~a heater resistance arrangement comprising~~ a first resistor and a second resistor connected in parallel through a first thermostat connected to interrupt current flow through said first resistor and a second thermostat in series with said first thermostat for interrupting current flow through said second resistor, said second thermostat being selected to interrupt current flow to said second resistor at a slightly lower temperature than the temperature at which said first thermostat interrupts current flow to said first resistor to provide an automatic heat control and motor speed change system.

9.(currently amended) A ~~low-powered~~ current controlled induction motor for driving a fan in a heater circuit ~~for connection to be connected to a~~ domestic voltage source where ~~the load is a resistor heater means~~ forms an electrical load having a value to provide on connection of the circuit to the source a voltage drop ~~thereacross~~ across said load just less than the voltage of the source, said motor having coil windings for connection in series with the resistor heater means and the source whereby current flowing through the heater means flows through said motor coil windings, said coil windings

11377-1US

- 4 -

having a ~~low number of~~ fewer than 50 and at least about 28 turns and being a wire size of the order of 14 to 18 gauge to accept heater current of at least 12.5 amperes without heating.

10. Cancel

11. Cancel

12. (currently amended) A motor as claimed in Claims 9 ~~or 10~~ in which said motor is a shaded 2 pole induction motor in which the number of turns of said motor windings comprises approximately at least 14 turns per pole.

13. (new) A current controlled induction motor for series connection with a load which on connection to a domestic voltage source provides a voltage drop across the load just less than the voltage of the source, said motor having windings of fewer than 50 and at least about 28 turns, said windings being of 14 to 18 gauge wire having a current carrying capacity of at least 12.5 amperes without heating.

14. (new) A current controlled induction motor as claimed in Claim 13 in which said motor is a two pole motor and said motor windings comprise fewer than 20 turns per pole.

15. (new) A current controlled induction motor as claimed in Claim 14 in which said motor speed is of the order of 1100 r.p.m. when said load is a 500 watt heater.

11377-IUS

- 5 -

16.(new) A current controlled induction motor as claimed in Claim 14 in which said motor speed is of the order of 1800 r.p.m. when said load is a 1000 watt heater.

17.(new) A current controlled induction motor as claimed in Claim 14 in which said motor speed is of the order of 2800 r.p.m. when said load is a 1500 watt heater.

18. (new) A current controlled motor for series connection with a selectable resistance means which on connection to a voltage source having a given current carrying capacity provides a voltage drop across said resistance means just less than the voltage of said source, said motor having windings of a wire size to accept a current at least substantially up to the current carrying capacity of said source without heating, the arrangement being such that the speed of the motor changes with selection of the selectable resistance means.